

REMARKS/ARGUMENTS

In the Office Action mailed July 9, 2008 and the advisory action mailed October 10, 2008 (hereinafter, collectively the "Office Action"), the Examiner rejected claims 1-4, 6, 8, 9, 13, 14 and 22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,565,840 to Thorner *et al.* (hereinafter "Thorner"). Claims 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Thorner. Claims 15-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Thorner in view of U.S. Patent No. 6,135,450 to Huang *et al.* (hereinafter "Huang"). Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Thorner in view of U.S. Patent No. 4,553,748 to Allen *et al.* (hereinafter "Allen"). These issues are addressed herein.

Claims 1, 6, 9-12, and 22 have been amended. Claim 21 has been canceled.

I. § 102(b) Rejection of Claims 1-4, 6, 8, 9, 13, 14 and 22

The Examiner rejected claims 1-4, 6, 8, 9, 13, 14 and 22 under 35 U.S.C. § 102(b) as being anticipated by Thorner. This rejection is respectfully traversed.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131 (*citing Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Id.* (*citing Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, "the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." *In re Paulsen*, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994). Further, the cited reference must disclose all the elements "arranged or combined in the same way as in" claim 1, as required by Section 102. (*Net MoneyIN, Inc. v. Versign, Inc. et al.* (Case No. 07-1565) (Fed. Cir. Oct. 20, 2008) ("We thus hold that unless a reference discloses within the four corners of the document not only all of the limitations claimed but also all of the limitations arranged or combined in the same way as recited in the claim, it cannot be said to prove prior invention of the thing claimed and, thus, cannot anticipate under 35 U.S.C. § 102."))

Claim 1 has been amended to include the limitation of previous claim 21, and additional limitations.

Examiner acknowledges that Thorner does not explicitly teach the electrode unit transmits a signal in the form of an electrical pulse to the adjacent skin of the player thereby to stimulate muscles and invoke an involuntary response. However, Examiner asserts that Allen allegedly reaches that limitation, and previously rejected claim 21 on grounds of obviousness based on that assertion. Applicant respectfully disagrees, as discussed below.

Allen discloses the use of an electrostatic generator to impart static electrical charge to a player via high voltage low current static electrical charging. This charge has the effect of causing the player's hair to stand on end, primarily for visual effect. However, there is no stimulation of muscles or involuntary muscular response, as presently claimed. The static charge taught by Allen is readily distinguished from the electrical pulses of claim 1, which invoke an involuntary muscular response. It is clear that the static charge taught by Allen has no such effect. See, for example, column 3, lines 30 to 33:

Advantageously, no current flows through the body of the player, so that no unpleasant electrical shock is received.

Furthermore, Allen discloses various other measures that are taken to prevent exposing the player to "electrical shock". In this manner, Allen in fact teaches away from the present invention, which centres on the provision of pulses that invoke involuntary muscular responses (however "unpleasant" those might be).

It is also noted that, by virtue of the arrangement discussed in Allen, a player's hair stands on end due to electrostatic effects, rather than any form of muscular stimulation. On the basis of the above comments, Applicant submits that an obviousness rejection cannot be sustained on the basis of the present art, and reconsideration of the claims is respectfully requested.

Furthermore, Applicant asserts that the technology of Allen is incapable of being adapted into a wearable electrode unit. Specifically, Allen discloses the use of a Van de Graaff electrostatic generator (or dirod electrostatic generator) to generate charge, which must then be transferred to an electrode with which a player makes skin contact. It does not seem technically feasible to implement such an approach in respect of a wearable electrode unit, as presently claimed, primarily due to the bulky nature of electrostatic charge devices.

Claim 1 has also been amended to include an added limitation whereby the stimulation signals are varied to simulate different events occurring during the activity involving the player. The technology disclosed in Allen is incompatible with this limitation due to inability to accurately control the sorts of electrostatic generators disclosed. For example, a Van der Graaff generator is inherently imprecise, with factors such as relative humidity influencing the level of charge generated.

Applicant also asserts that various limitations introduced into other claims by way of the current amendments are not taught in the prior art. For example:

- Recordal and processing a player's repose to stimulation signals so as to allow adjustment of the intensity of stimulation signals delivered to the player (claim 9).
- A plurality of wearable units that are configured to be worn at discrete locations on the player's body thereby to stimulate muscle tissue and evoke involuntary muscular responses at those locations on the player's body (claim 10).
- The use of a transcutaneous electrical neural stimulation device for controlling the stimulation signals (claims 11 and 22).
- Electrical pulses have the following characteristics: 12-80 volts; 40-100 microsecond pulse width; and 2 to 221 Hz (claims 12 and 22). To this end, Applicant notes that Allen discloses voltages of 20,000 volts or more (see column 7).

In view of the foregoing, reconsideration of the rejection of claims 1-4, 6, 8, 9, 13, 14 and 22 is respectfully requested.

II. § 103(a) Rejection of Claims 10-12

The Examiner rejected claims 10-12 under 35 U.S.C. § 103(a) as being unpatentable over Thorner. This rejection is respectfully traversed.

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. KSR Int'l Co. v. Teleflex Inc., 550 U.S. ___, 2007 U.S. LEXIS 4745, at **4-5 (2007) (citing Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966)). As the Board of Patent Appeals and Interferences has recently confirmed, "obviousness requires a suggestion of all limitations in a claim." In re Wada and Murphy, Appeal 2007-3733 (citing CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003)). Moreover, the analysis in support of an obviousness rejection "should be made explicit." KSR, 2007 U.S. LEXIS 4745, at **37. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." Id. (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Claim 10 has been amended to require "wherein the plurality of wearable units are configured to be worn at discrete locations on the player's body thereby to stimulate muscle tissue and evoke involuntary muscular responses at those locations on the player's body."

Claims 11 and 12 have been amended as follows:

11. (currently amended) The feedback assembly as claimed in claim 1 comprising a transcutaneous electrical neural stimulation device for controlling the stimulation signals wherein the at least one wearable electrode unit is wired to the gaming device.

12. (currently amended) The feedback system as claimed in claim 1 wherein the electrical pulses have the following characteristics:
12-80 volts;
40-100 microsecond pulse width; and
2 to 221 Hz 11 including an interface unit which includes a signal generator.

For the reasons explained above, Applicant respectfully submits that these limitations have not been taught or suggested by the cited reference. Accordingly, the rejection of these claims should be withdrawn.

III. § 103(a) Rejection of Claims 15-20

The Examiner rejected claims 15-20 under 35 U.S.C. § 103(a) as being unpatentable over Thorner in view of Huang. This rejection is respectfully traversed.

Claims 15-20 depend indirectly from claim 1. As noted above, Applicant respectfully submits that claim 1, as amended, is allowable over the cited references. Thus, for at least the reasons provided above, Applicant respectfully submits that claims 15-20 are allowable and respectfully requests that the pertinent rejection be withdrawn.

IV. § 103(a) Rejection of Claim 21

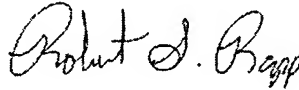
The Examiner rejected claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Thorner in view of Allen. Claim 21 has been canceled.

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V. Conclusion

Applicants respectfully assert that all pending claims are patentably distinct from the cited references, and request that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,



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